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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/743,778

12/24/2003

Jcong Dae Seo

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9463

34610 7590 10/09/2007  
KED & ASSOCIATES, LLP  
P.O. Box 221200  
Chantilly, VA 20153-1200

EXAMINER

THOMPSON, CAMIE S

ART UNIT

PAPER NUMBER

1794

MAIL DATE

DELIVERY MODE

10/09/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/743,778	<b>Applicant(s)</b> SEO ET AL.	
	<b>Examiner</b> Camie S. Thompson	<b>Art Unit</b> 1774	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on RCE filed September 14, 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on September 14, 2007 has been entered.
2. Applicant's amendment and accompanying remarks filed August 2, 2007 are acknowledged.
3. Examiner acknowledges amended claims 1 and 4.
4. The rejection of claims 1-2 and 6-10 under 35 U.S.C. 102(b) as being anticipated by Ohnuma et al., U.S. Patent Number 5,153,073 is overcome by applicant's amendment.
5. The rejection of claims 3-5 under 35 U.S.C. 103(a) as being unpatentable over Shi et al., U.S. Patent Number 5,935,721 in view of Ohnuma et al., U.S. patent Number 5,153,073 is overcome by applicant's amendment.

### ***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

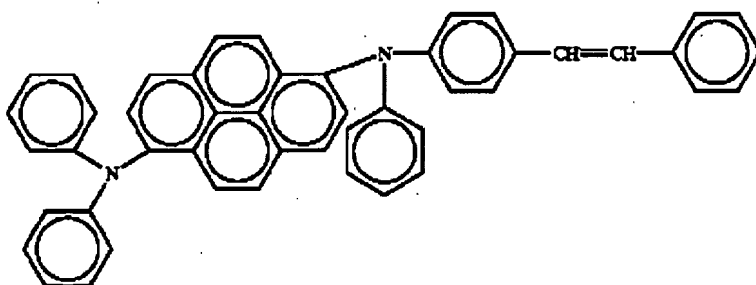
(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an

Art Unit: 1774

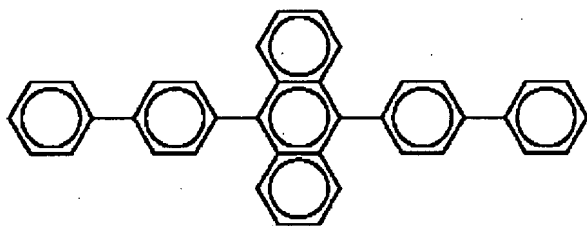
international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Hosokawa et al., U.S. Patent Number 6,534,199.

Hosokawa discloses an organic electroluminescent device comprising a pair of electrodes with a light emitting layer disposed therebetween. The reference discloses that the light emitting medium comprises (A) an amine derivative such as



and (B) an anthracene derivative such as

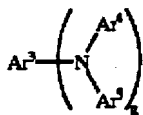


(see compounds EM23 and EM32).

Compound EM23 of the reference reads on compound H-11 of the present claims. Compound

Art Unit: 1774

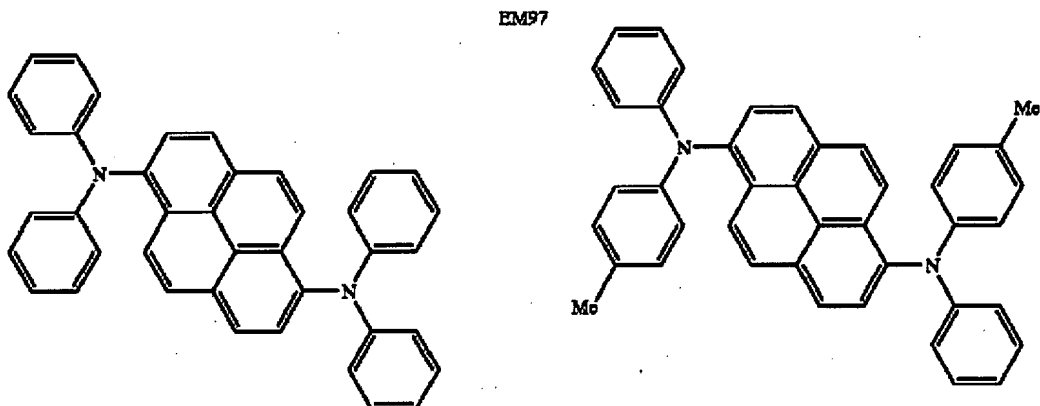
EM34 of the Hosokawa reference reads on the pyrene derivative of present claim 1. Hosokawas discloses that the amine derivative has the general structure of



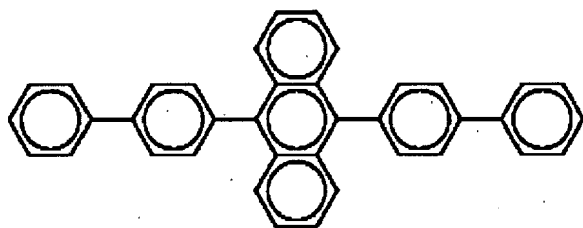
wherein Ar<sub>3</sub> to Ar<sub>5</sub> is an aryl group that can be substituted (see column 3, line 35 to column 4, line 68). It is also disclosed in the reference that the aryl group can be a pyrenyl group and g can be 1. Also, it is disclosed in column 4 that the substituents can be alkyl substituents with 1 to 6 carbon atoms as per instant claims 7-8. Reference claim 5 discloses that the weight ratio of component (A) to component (B) is 2:98 to 9:91 as per instant claim 2.

8. Claims 1-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Matsuura et al., U.S. Pre Grant Publication 2005/0064233.

Matsuura discloses an organic electroluminescent device comprising a pair of electrodes and a light emitting medium disposed therebetween. The reference discloses that the light emitting medium comprises (A) an amine derivative and (B) an anthracene derivative (see paragraph 0008). Additionally, the reference discloses that the amine derivative can have the structure



and the anthracene derivative has the structure



Matsuura reads on the present claims when the anthracene derivative of the reference is compound H-11 of the present claims. Compound EM98 of the Matsuura reference reads on compound S-2 of the present claims. Matsuura claim 12 discloses that the weight ratio of component (A) to component (B) is 1:99 to 20:80 as per instant claim 2.

### *Response to Arguments*

9. Applicant's arguments with respect to claims 1-10 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communication from the examiner should be directed to Camie S. Thompson whose telephone number is (571) 272-1530. The examiner can normally be reached on Monday through Friday from 7:30 am to 4:00 pm. If

Art Unit: 1774

attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano, can be reached at (571) 272-1398. The fax phone number for the Group is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



MILTON I. CANO  
SUPERVISORY PATENT EXAMINER